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ABSTRACT

The Austin Independent School District (AISD) Office of Research and Development publishes abstracts of research projects conducted within the AISD by external agencies or individuals. This compilation begins with a roster of external research projects in tabular form showing the AISD project number, title, project director and sponsor, schools where research is being conducted, and whether or not a full report is on file. The bulk of the document consists of abstracts and interim reports which include participating schools, description of the study, description of results, implications of results, and implications for AISD. (DWH)

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83.59

REPORT

Title: Research by External Agencies or Individuals in AISD

Contact Person: Glynn Ligon

For the sixth year, we are publishing the abstracts of research projects conducted within the Austin Independent School District by external agencies or individuals. Each of these researchers has had to go through a screening process in which AISD staff members from a variety of departments reviewed their proposals. This is to ensure that:

- The time and energies of AISD staff and students are protected.
- Only those projects meeting the criteria established by the District as conditions for participation in research are approved.
- High-quality research that fits the needs and interests of the District is promoted.

The Office of Research and Evaluation is the official point of first contact for all proposals to conduct research in the District. Many of these initial contacts are by phone or personal visit. Discussions at that time often result in the immediate determination that proposals are not viable. For those projects which do appear to be feasible, the researcher is provided forms and instructions for a formal proposal. When the formal proposal is received, a three-(or more) member administrative review committee is appointed. The Office of Research and Evaluation makes a final decision on administrative approval or disapproval of the project based on the recommendations of the committee members. If approval is given, the Director works with the project director and appropriate AISD staff to select suitable schools and/or departments for the study. However, the principals on the selected campuses may decide that the research project would interfere with instructional efforts and disallow the project.

The researcher is required to provide an abstract for this volume as well as two copies of any dissertation, publication, or other report issuing from the study. These are kept on file at the Office of Research and Evaluation. The abstracts included in this publication are entirely the work of the authors named without the review or endorsement of the Office of Research and Evaluation.

A total of 31 proposals was reviewed between June 15, 1983, and June 15, 1984. Of these, 23 were approved (including one to be conducted in 1985), 7 were disapproved, 1 was withdrawn, and 1 was not conducted due to lack of parent permission.

AUSTIN INDEPENDENT SCHOOL DISTRICT

Office of Research and Evaluation

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

83.59

Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
959.19	The Relationship Between Achievement Test Response Changes and Grade Level, Ethnicity, and Family Income Level	M. Kevin Matter Sponsor: Dr. Edmund Emmer, U.T.	Office of Research and Evaluation	No
960.07	A Study of the Relationships Among Response-produced Feedback in Family Interaction, Object Relations, and Impulsivity	Mark J. Wernick Sponsor: Dr. Frank Wicker, U.T.	Anderson, Austin, Johnston, LBJ, and Lanier High Schools, Burnet, Dobie, Fulmore, and Lamar Junior High Schools	No
R82.16	Questions Used by Teachers of Hearing-Impaired Students During Informal Conversation	Laurie Nipper Sponsor: Madeline Maxwell, U.T.	Reilly and Rosedale Elementary Schools	Yes
R83.03	The Impact of Basal Reader Characteristics on the Development of Reading Skill - a Longitudinal Study	Connie Juel Philip Gough Sponsor: University of Texas Faculty	Houston Elementary School	No
R83.04	Contingencies of Evaluative Feedback in Physical Education	Lynn Dale Housner Sponsor: University of Texas Faculty	Bedichek, Burnet, Lamar, Pearce, and Porter Junior High Schools	No
R83.06	The Development of Metalinguistic Abilities in Children	Kerry J. Washburn Sponsor: University of Texas Faculty	Bryker Woods, Casis, Cunningham, Doss, Govalle, Gullett, Highland Park, Hill, Pillow, and Summitt Elementary Schools	No

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Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
R83.09	Life Perceptions in Middle Childhood: A Three-Phase Study	Beverly Hardcastle Sponsor: Southwest Texas State University Faculty	Webb Elementary School	No
R83.10	Managing Academic Tasks in Junior High Schools	Walter Doyle Sponsor: University of Texas Faculty	Burnet, Dobie, Martin, Porter, and Pearce Junior High Schools	No
R83.12	Listening Skills Instruction for Junior High Schools	P. Terry Newton Sponsor: St. Edwards University Faculty	Pearce and Fulmore Junior High Schools with Bedichek and Burnet Junior High Schools as controls	Yes
R83.13	The Effect of a Teacher Active Inservice Program on Teachers' Understanding of Relevant Energy Concepts, Stages of Concern About Implementing A Curriculum and Student Achievement	Edward J. Zielinski Sponsor: Dr. Earl J. Montague, U.T.	Anderson, Crockett, Lanier, Reagan, Robbins, and Travis High Schools	No
R83.15	Children's Use of Conjunctions When Writing for Different Audiences and Purposes	Patricia O'Neal Willis Sponsor: Diane L. Schallert, U.T.	Cunningham Elementary School	No
R83.18	Instructional Leadership Styles of Effective Elementary School Principals in Texas	Norma A. Lewis Sponsor: Dr. M. B. Nelson East Texas State University	Ortega, Read, Doss, and Oak Hill Elementary Schools	Yes

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Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
R83.21	The Test of Practical Knowledge and the OASIS Interest Schedule: Their Use With Students Who Are Visually Handicapped	Anne L. Corn Sponsor: University of Texas Faculty	O. Henry and Porter Junior High Schools; Reagan, Lanier, Travis, and McCallum High Schools	Yes
R83.22	Analyses of Austin Longitudinal Student Data File	Peter H. Rossi Sponsor: University of Massachusetts Faculty	Office of Research and Evaluation	No
R84.01	Teacher Beliefs Study	Walter Doyle Julie Sanford Sponsor: University of Texas Faculty	Murchison Junior High School	No
R84.02	An Analysis of Innovation Implementation and Change Facilitator Styles of High School Principals	Martha C. Hougen Sponsor: Dr. Gene Hall University of Texas	Austin, Johnston, and Travis High Schools	No
R84.03	Biological Investigations in High School Classrooms: A Cooperative Effort of Teachers, Students, and Scientists	Kathleen A. O'Sullivan Sponsor: Dr. Earl J. Montague, U.T.	Anderson, Crockett, and Travis High Schools	No
R84.04	The Effect of Parent-Teacher Communication and Problem Solving on the Educational Development of Underachieving Elementary Children	Craig A. Porterfield Sponsor: Martin Tombari, U.T.	Blackshear, Harris, Langford, and Ridgetop Elementary Schools	No

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Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
R84.05	The Modes of Communication Used in Junior and Senior High School Classes By Hearing-Impaired Students and Their Teachers and Peers	Debra J. Raimondo Sponsor: Madeline Maxwell, U.T.	Johnston and Reagan High Schools and Pearce Junior High School	Yes
R84.07	Managing Academic Tasks in Junior High Schools, additional data collecting during Fall 1983	Walter Doyle Sponsor: University of Texas Faculty	Porter Junior High School	No
R84.08	Investigate Academic Problems in Children Living in One Parent and Two Parent Homes	Geraldine Ellison Sponsor: Dr. Alexander Brown, Prarie View University	Blackshear, Campbell, and Maplewood Elementary Schools	No
R84.11	Social Skills Deficits in Learning Disabled Adolescents	Diane Silver Sponsor: Dr. Donald Veldman, U.T.	Bedichek, Dobie, Fulmore, Lamar, Murchison, Martin, and O. Henry Junior High Schools	No
R84.12	A Study of Secondary Education in AISD	Pat Oakes Sponsor: League of Women Voters	Austin, Crockett, Johnson, Johnston, Lanier, McCallum, Reagan, and Travis High Schools	No
R84.13	An Investigation Using A High-Frequency Emphasis Spondaic Wordlist for Spondee Threshold Testing with Children	Sharon T. Oprasal Sponsor: Frederick N. Martin, U.T.	Brooke Elementary School	No

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Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
R84.14	Organizational Factors Associated with Reducing Alienation in Schools Serving the Unpreferred Student	Jimmie L. Todd Sponsor: Dr. Mike Thomas, U.T.	W. R. Robbins Secondary School	No
R84.16	An Observational Study of Young Children Using Microcomputers	Celia Genishi Sponsor: University of Texas Faculty	Highland Park Elementary	No
R84.17	Spatial Exploration and Spatial Orientation Abilities in Young Visually Handicapped Children	Nancy Hazen-Swann Margaret Sullivan Sponsor: University of Texas Faculty	Early Childhood Center, Casis	No
R84.18	Sexual Bias in the Mathematics Classroom: The Teacher's Role	Gail R. Ryser Sponsor: Dr. Ray Carry, U.T.	Fulmore, Lamar, and O. Henry Junior High Schools	No
R84.19	The Effect of Brief, Structured Writing Practice on Children's Written Composition	Patricia O'Neal Willis Sponsor: Diane L. Schallert, U.T.	Becker, Brooke, and Cook Elementary Schools	No
R84.20	Effective Teaching Practices in the Multicultural Elementary Classroom	William M. Bechtol Sponsor: Southwest Texas State University Faculty	Blackshear, Metz, and Norman Elementary Schools	No
R84.21	Evaluating Students' Coping Style	James E. Gilliam Sponsor: University of Texas Faculty	Webb Elementary School	No

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Project Number	Title of Research Project	Project Director Sponsor	Schools Where Being Conducted	Full Report on File
R84.22	Knowledge of Forms and Functions of Print in Preschool-Aged Children	Nancy Roser James Hoffman Sponsor: University of Texas Faculty	Allan, Brentwood, Brown, Casis, Dawson, Govalle, Harris, Joslin, Oak Springs, Odom, Pecan Springs, Pillow, Rosewood, Summitt, and Zilker Elementary Schools	No
R84.25	Handicapped Minority Research Institute on Language Proficiency	Alba A. Ortiz Sponsor: University of Texas Faculty		No
R84.27	Relationship Between Multiple Risk Factors and Child Outcome for Children of Adolescent Parents	Anne Martin Sponsor: Dr. Keith Turner, U.T.	Travis and Johnston High Schools and the Allan Elementary Teenage Parent Program	No
R84.29	Managing Academic Tasks in High Schools	Walter Doyle Sponsor: University of Texas Faculty	To Be Selected	No
R84.30	The evaluation of physical deficiencies (leg strength imbalance and the short leg syndrome) that relate to knee injury potential in contact sports (football)	Karl Klein Sponsor: Charles Craven, U.T.	Crockett and Lanier High Schools	No

The Relationship Between Achievement Test Response Changes and Grade Level, Ethnicity, and Family Income Level

Abstract

M. Kevin Matter

Participating Schools:

The Office of Research and Evaluation

Description of Study:

Achievement test answer sheets and test booklets (Iowa Tests of Basic Skills (ITBS)) will be examined for evidence of answer changes made during the test administration. Contrary to popular belief, research has shown that most individuals change more items from an incorrect to a correct alternative than vice versa, resulting in an increase in the total number of items correct. Answer sheets and booklets will be examined for significant differences in the rates and types of response changes made among different ethnic groups, family income levels, and grade levels.

Description of Results:

No results are available at this time.

Implication of Results:

This study has direct reference to the reliability and validity of results from multiple-choice tests. Modifications to test instructions regarding answer changing may provide more accurate and useful test results.

Implications for AISD:

Results should be related to teacher/student directions for administering/taking standardized achievement tests. Changes in directions, with resulting changes in behavior, may promote more valid test scores and an increased utility for course selection and placement.

83.59 960.07

A Study of the Relationships Among Response-produced Feedback in Family Interaction, Object Relations, and Impulsivity

Abstract*

Mark Wernick

Participating Schools: Anderson, Austin High, Burnet Jr. High, Dobie Jr. High, Fulmore Jr. High, Johnston High, LBJ, Lamar Jr. High, Lanier High

Description of Study: The purpose of this study is dual; in applied areas it is to assess interaction patterns of families with children having reflective or impulsive learning styles to see if qualitative differences in those patterns exist. Object relations are also to be assessed, in keeping with theoretical aims of the study to see if reflectivity/impulsivity has an underlying relationship with early development and learning.

Description of Results: Data has been collected from 24 families. Of these, approximately half were intact. Of the non-intact families, several were mother-only and several were natural mother and step-father. One involved a child reared by grandparents. This latter, as well as several whose reflectivity/impulsivity classification is uncertain, are being employed as pilot data. About 17 of these families are from AISD, and the other seven are from a youth services agency in Houston, Texas. Data analysis is being performed this summer.

Implications of Results: If a relationship is found between children's classification on the reflectivity/impulsivity dimension and family interaction patterns, and a further relationship found between these variables and learning, justification for whole family involvement in addressing a wide variety of learning problems will be enhanced. Any connection found between early developmental arrest--assessed through the object relations analysis--and reflectivity/impulsivity or learning, will enhance understanding of the possibilities, limitations, and directions such whole family involvement may most profitably take.

Implications for AISD: Actually, usefully interpretable results are hoped to have implications for all centers of learning. It will probably prove valuable in the long run to have a professional arm attached to school districts whose sole responsibility is family outreach, family education, and family support, staffed by professionals and paraprofessionals skilled in the areas of family processes and early development. Even where such services are not viewed as properly within the jurisdiction of the schools, additional empirically acquired understanding of the type sought here should aid in the referral process.

*Final abstract of this project is to be published in the 1984-85 report.

QUESTIONS USED BY TEACHERS OF HEARING IMPAIRED STUDENTS DURING INFORMAL CONVERSATION

Abstract

Laurie Nipper, Ph.D.

Participating Schools: Reilly Elementary, Rosedale Elementary

Description of Study: The purpose of this study was to describe the questions used by teachers of hearing impaired students during a news period or sharing time. Teachers of students at two age/grade levels (5-7 years and 10-12 years) were video-taped for two 15 minute sessions while interacting with their classes using simultaneous communication (speech, signs, fingerspelling). Questions were analyzed according to three variables which have been reported to change in the speech of adults to younger vs. older hearing children: increasing use of causal-temporal type questions (why, when, how); increasing syntactic complexity through inclusion of embedded and conjoined elements; and increasing lexical diversity as measured by a type-token ratio. Differences in the functions of teacher questions between the two groups were also investigated.

Description of Results: Results indicated no significant differences between teacher groups on the four question variables. Teachers of older deaf children tended to use the same number of cognitively complex questions (why, when, how) and syntactically complex elements as teachers of younger children. Type-token ratios were similar for the two groups. In their use of various question functions, teachers of older deaf children used more requests for information and requests for talk. Teachers of younger deaf children used more requests for confirmation and requests for their students to display knowledge. Accuracy of use of simultaneous communication was not significantly different between teacher groups. However, teachers matched sentence meaning in their speech and signs only 88% of the time for the older group and 84% for the younger group.

Implications of Results: Teachers of the deaf in this study did not differ markedly in their use of questions or in their sign-speech match scores with their students during informal conversation. These results suggest that teachers of older students may have been adjusting more to the hearing impairment rather than the fact that their students were both cognitively and linguistically more mature than the younger students. Teachers also may have simply adopted a "style" of communicating during the news session which focused more on the content of the interaction rather than on considerations of question form, grammatical complexity or diversity of vocabulary.

Implications for AISD: Results presented above were based on a small sample of only 10 teachers of the hearing impaired. Descriptions of teachers' questions suggest at least two implications, however. First, the news session may be a classroom opportunity in which teachers would want to focus more on considerations of language form, question type, rather than on question content. Second, these results indicate the need for further delineation of the parameters of the deaf child's linguistic environment in order to better remediate his linguistic deficit

THE IMPACT OF BASAL READER CHARACTERISTICS ON THE DEVELOPMENT OF READING SKILL - A LONGITUDINAL STUDY

Abstract
Connie Juel, Ph.D. and Philip B. Gough, Ph.D.

Participating Schools: Houston Elementary

Description of Study: The purpose of the present study was to investigate the extent to which the characteristics of the words comprising the text of a basal reading series impacts the development of word recognition, spelling, reading comprehension and writing skills of children in grades one through four. Word characteristics of primary concern were decodability and frequency of occurrence. The study also examined the influence of phonemic awareness in these four areas. Phonemic awareness is defined as the ability to attend to and manipulate sounds in the context of other sounds (e.g., the ability to substitute /k/ for /t/ in the word "part" to form "park.")

Description of Results: This study has been approved for four years. The results being reported are for the first grade year of the study. The two basal reading series which were compared were the American Book Company (ABC) and the Scott Foresman (SF) series. At the preprimer level ABC contained more easily decodable words (i.e., words whose pronunciation could be predicted by their spelling pattern - CVC, CVCE) than did the SF series. The average number of word repetitions at the preprimer level in the SF series was 98.9 and in the ABC series it was 44.8. The SF series contained 33,111 words in running text through the 1^2 level book compared to 17,829 words in the ABC series. At the end of first grade children with low Metropolitan Readiness Test (MRT) scores who were placed in the ABC series made more progress in reading, as measured by the Iowa reading test, than comparable children with low MRT scores placed in the SF series. Exposure to print had an especially positive effect on spelling achievement in first grade. But overall, phonemic awareness was the strongest predictor of success in all four areas.

Implications of Results: Given the composition of the ABC preprimers (more easily decodable words) and the progress of children with low MRT scores placed in that series one is lead to conclude that a strong phonics program for children with poor auditory/phonemic awareness skills would be beneficial to them. However, despite reading series placement, little progress in decoding skills occurred until a certain level of oral phonemic awareness was reached. Mexican American and Black American children were found to have the weakest phonemic awareness abilities at the beginning of the school year. However a subgroup of these children made enormous growth in phonemic awareness during the early part of first grade and ended first grade reading at or above

grade level. However those children who remained low in phonemic awareness ended the year with poor reading scores on the Iowa. Phonemic awareness and decoding skills accounted for most of the performance in word recognition, spelling, reading comprehension, and writing.

Implications for AISD: The results presented are based upon the first year of a four year study and are therefore tentative. However, at least two implications of the study appear justified at this time. First, it is suggested that both the instructional philosophy of the basal reading series as reflected in the characteristics of the words comprising the text of the series and the incoming abilities of the student be considered when placing students in a basal text. Second, a program providing training in oral phonemic awareness would be advantageous for children with poor incoming phonemic awareness skills.

Contingencies of Evaluative Feedback in Physical Education

Abstract

Lynn D. Housner Ph.D.

Participating Schools: Porter, Burnet, Bedicheck, Pearce, Lamar

Description of Study and Findings: The purpose of the study was to describe the patterns of evaluative feedback exhibited by junior high school physical educators and to determine if the feedback patterns are similar to those found to be associated with learned helplessness in the classroom. Learned helplessness is characterized by the perception that failure is insurmountable. It is more evident among girls than boys. Evidence from classroom research indicates that differential evaluative feedback exhibited by teachers toward boys and girls may contribute to sex differences in learned helplessness. Available data indicate that the percentage of negative feedback related to the quality of academic performance is substantially higher for girls than for boys. In the present study the evaluative feedback received by boys and girls during physical education was examined. Five male and five female junior high school physical education specialists were videotaped on three separate occasions. Following videotaping, teachers' perceptions of each student's motor ability, social skills, motivation, and motor performance were collected using a six-point Likert Scale Questionnaire. All positive and negative feedback statements were coded for each student by two independent observers (interrated reliability = .91), using an observation system consisting of four categories; (1) outcome of motor skill, (2) form of skill, (3) cognitive aspects of instruction, and (4) conduct. The data was analyzed using a 2 X 2 X 2 X 4 (teacher sex X student sex X feedback valence X feedback type) Manova. The findings indicated that teachers provided more negative skill-related feedback to girls (75% versus 60.5%) and less negative conduct feedback (25% versus 39.5%) to girls than to boys. For positive feedback, teachers provided boys with more outcome feedback than girls (30.0% versus 19.3%). The findings showed that, as with classroom teachers, physical education teachers provided feedback that could contribute to learned helplessness. Also, regression analysis which included teachers' perceptions of student aptitudes as predictor variables showed that student sex contributed more to differential feedback patterns than student aptitudes.

Implications of Results: The findings indicate that female students receive more negative skill-related feedback than do boys. It is entirely possible that as in the classroom this pattern of feedback may contribute to learned helplessness among girls. However, more research must be conducted before the implications of these findings can be discussed.

Implications for AISD: Although the study was only a preliminary investigation, the findings do suggest that physical education teachers must be aware of the high levels of negative skill-related feedback that they provide to female students. In order to avoid the possible deleterious effects of learned helplessness attempts should be made to reduce negative feedback and increase positive feedback.

The Development of Metalinguistic Abilities in Children

Abstract

Kerry J. Washburn, David T. Hakes, Ph.D., Stanley A. Kuczaj II, Ph.D., Leslie B. Cohen, Ph.D., and John C. Loehlin, Ph.D.

Participating Schools: Bryker Woods, Casis, Cunningham, Doss, Govalle, Gullett, Highland Park, Hill, Pillow, and Summitt Elementary Schools.

Description of Study: This study investigated the development of several metalinguistic abilities (i.e., abilities that involve thinking about language, such as abilities to make grammaticality judgments, detect rhyme, and appreciate figures of speech). It was designed to examine the interrelationships among these abilities as they develop, as well as their relationships to cognitive development, language comprehension, reading readiness and achievement, and home environment variables. This was a longitudinal study that began when the children were 3 years old and continued through the 1982-83 academic year. During this year, the oldest children in the study were in first grade.

Description of Results: At this time we are just beginning to analyze the data. The major results--those concerning interrelationships among the variables--are not yet available. We do, however, have some evidence concerning developmental changes in individual children's performance on the various tasks, changes that have previously been reported only in group data. For several tasks our data add some new information about the age-related change. For example, it has been reported that children between the ages of 4 and 6 tend to misunderstand the word "big," treating it as more or less synonomous with "tall." Younger children do not do this. Thus, the reported developmental pattern is one where understanding of "big" gets worse with increasing age, and only later improves. Almost all of the children in our study showed this pattern. Furthermore, the period of misinterpreting "big" was quite long, lasting up to 2½ years.

Another finding concerns the development of comprehension of passive sentences like The boy was pushed by the girl. Group data have suggested a developmental sequence of chance-level performance on passives at age 3, followed by a period of systematically misunderstanding these sentences, followed by gradual improvement. Many of the children in our project did not show this sequence. For those children who did show the pattern, the period of misunderstanding passives was rather short, lasting only a few months.

We have also observed developmental change in the apparent basis for children's responses in several metalinguistic tasks. In one task we asked children to judge whether each of a series of sentences was acceptable ("grammatical"). When the children were 4 and 5 years old, many of them demonstrated a "sensibility" criterion for judging sentences. They would call an item "OK" if its meaning made sense. For

example, they would judge sentences like The sleepy rock was in the middle of the road as "wrong"; however. they accepted syntactically unacceptable items like The lady closed window, calling these kinds of items "OK." As they got older, many of them began to correctly reject the latter kinds of items as "wrong," demonstrating the use of additional, syntactic bases for judging acceptability.

An analogous change in response criterion occurred for a task tapping children's knowledge of what a word is. We presented syllables, words, phrases, and sentences to the children and asked whether each item was a word. At about the same time that they used the "sensibility" criterion in the acceptability judgment task, most of the children tended to call any item that was meaningful or had a referent a "word." They correctly stated that items like dog and television were words, but they also said that phrases like run and jump and full sentences were words. Items they said were not words included syllables like im and "function" words such as the and at. When asked why these items weren't words, children would often give reasons like "There's no such thing as 'at'" or "It doesn't mean anything." Many of them demonstrated more complex criteria later on, giving more correct responses for phrases, sentences, and function words.

Implications of Results: For some tasks, such as comprehension of "big," developmental changes suggested by group data have been replicated in our study. For others (e.g., comprehension of passives) our data suggest that there may be more substantial individual differences in development than previous group data had implied.

The developmental changes in performance on the metalinguistic tasks described here suggest that young children can think about and use semantic properties of utterances (meanings of words and sentences) in making metalinguistic judgments; later, they begin to consider syntactic and morphological/phonological aspects as well.

We anticipate that results of our analyses, when they are all completed, will have additional implications. Previous studies have found relationships between metalinguistic abilities and reading achievement when they are assessed concurrently. One of the major goals of our project is to find the kinds of early language behaviors that predict later metalinguistic and reading performance. We also want to identify the early cognitive and home environment variables that contribute to both early and later language and reading performances.

Implications for AISD: Identification of early linguistic, cognitive, and/or home environment variables that predict later reading and reading-related performances should suggest the kinds of diagnostic procedures that would identify children likely to have trouble learning to read. Also, our results may suggest procedures for remedial work with children found to be having difficulty reading or learning to read.

LIFE PERCEPTIONS IN MIDDLE CHILDHOOD: A THREE PHASE STUDY

83.59 R83.09

Abstract

Beverly Hardcastle, Ph.D.

Participating Schools: Webb Elementary (Austin), Cable Elementary (San Antonio), Lockhart Middle School, Dripping Springs Elementary School, Lamar Elementary (San Marcos).

Description of Study: A research approach incorporating grounded theory, interview, life study, and creative expression methods was used in an effort to see how children in middle childhood perceive their lives. The study began in 1982 with 20 4th grade children, was extended to 40 more in 1983, and in 1984 a follow through study was conducted with all 60 children. Teachers selected the children to participate on the basis of how well they knew them, with those they knew very well being regarded as high profile and those about whom they knew little were low profile. Each child was interviewed for 30 minutes twice within a two to four week period.

Description of Results: Analysis of the data in the three phases of the study is ongoing. Several of the emerging patterns are shared here. (1) Geographic mobility was evident in the group - 20% moved during the three years of the study. (2) When the 60 children completed the sentence beginning with "I worry about," the most frequent reply (47%) dealt with the welfare of a family member. The second most frequent (20%) was a concern over school work. (3) Sex differences were evident in their expressed preferences for favorite film stars and leisure activities. Children tended to pick favorite stars of their own sex. The home activities mentioned by the boys were different from those mentioned by the girls. (4) Career preferences differed according to sex, with girls selecting careers more traditionally feminine (i.e. teachers, nurses, secretaries) and boys selecting those more traditionally masculine (i.e. firefighter, policeman, sports player). (5) When children replied to the sentence stem "I am afraid of" the most frequent reply was animals, with the number making the reply increasing each year and the terms used to describe the animal becoming more specific (i.e. from dogs to Dobermans). (6) While the group patterns that are emerging are of interest, the individual profiles were most informative. Connections between children's oral histories, creative writing, and interview responses made the clearest patterns.

Implications of Results: Of immediate value is the discovery of the mobility of the children. School efforts could be made to ease the transition for newcomers. School counselors may wish to conduct group sessions focused on the needs of newcomers. Teachers may wish to assign "buddies" to welcome and orient the "new" child. The concern over the welfare of family members expressed by the children in the study reflects one theme of our times - that children are hurried and placed under pressure. Each of the patterns described above could have implications for the teacher or parent of a middle school child. Most important was the discovery that children are willing and able to share their perceptions of their lives when they are invited to do so. By better understanding the way they experience their experiences, we are better able to encourage their efforts.

Implications for AISD: Since only eight of the participants were from Austin, little can be said specifically for Austin students. The responses of the children in Austin are contributory to the patterns being found in the group as a whole.

Managing Academic Tasks in Junior High Schools

Project No. R83.10 and R84.07

Abstract

Walter Doyle, Principal Investigator

Participating Schools: Burnet, Dobie, Martin, Pearce, and Porter Junior High Schools.

Description of Study: This study examined how the content of the curriculum is translated into classroom tasks in junior high schools, with particular attention to tasks involving comprehension and higher level cognitive processes. Data were gathered in six science, mathematics, and English classes and a combined English/social studies class for higher ability students. Data collection included daily observations, examination of instructional materials and completed student work, and interviews of teachers and selected students.

Description of Results: Analyses and reports to date have focused on the overall character of academic tasks in junior high classes, the nature of content instruction in these classes, and student paths through the curriculum. A full report of the junior high school phase and a report on student roles will produced during 1984, and a high school phase of the MAT will be conducted in 1985. Results of both the junior high and the high school MAT studies will be used in producing a report on practical applications of MAT methods and findings for the teacher education community.

Preliminary results support the following propositions:

1. The teachers' choice of classroom tasks, design of the overall work production system, and decisions about interactive instruction all have direct impact on student behavior, classroom management, and opportunity for students to engage in higher level thinking.

2. Classroom and school environments and the need to progress through the curriculum create pressures which make it difficult for teachers to successfully sustain tasks requiring students to make decisions about how to use their knowledge and skills. Small-step, routinized tasks are easier to conduct and tend to prevail in many classrooms.

3. The accountability or grading system is an important part of academic task systems in classrooms, and it can be manipulated by teachers to accommodate and support tasks that make varying levels of demands on students.

Implications of Results: Translating content knowledge into classroom tasks is a complex undertaking for the beginning teacher. The Managing Academic Tasks study is leading to information and recommendations on structuring and directing student work, translating academic content and objectives into tasks, and assessing task outcomes. This knowledge will extend previous findings of research on classroom management to help secondary teachers establish effective work systems in their classes.

Implications for AISD: Research results can be used to help the District increase secondary teachers' understanding of curriculum tasks, especially higher level cognitive tasks. Such information has potential for improving teachers' effectiveness in planning student assignments, presenting instruction, and monitoring student work, and assessing task outcomes.

Listening Skills Instruction for Junior High Schools

Abstract

Terry Newton, Ph.D.

Participating Schools: Pearce and Fulmore Junior Highs

Description of Study: The purpose of the study was to investigate the effectiveness of directed Listening Training at the Junior High level and to develop appropriate materials and techniques to train teachers and students in the basic skill of listening. This process included pre- and post-testing using video listening tests and weekly workshops for a total of 20 contact hours in order to train teachers and develop curricular materials and techniques. Two control schools were also pre- and post-tested using the same video listening tests.

Description of Results: The two experimental Junior Highs showed significantly more improvement than the two control schools using the same tests. The two experimental schools showed a collective gain of 17.1% with Fulmore improving 14% and Pearce improving 20.3%. The two control schools showed a collective gain of 12.6% with Bedichek gaining 16.6% and Burnet gaining 12.6%. Several factors precluded an even more striking difference between the two groups of schools. First, the materials and techniques were developed as the program progressed and resulted in a small amount of classtime actually devoted to Listening Training. Second, the pre- and post-tests in the experimental schools were given in large, noisy rooms while the control group tests were given to small classes. Third, the total population of the experimental group was 224 while the control group had only 82. Finally, in all three classes of the control groups (1 in Bedichek and 2 in Burnet), the teachers volunteered for the testing and all remarked that their students poor showing on the pre-test would not be repeated on later tests. The tests and the teachers combined to motivate the students in the control schools to be better listeners. Teachers in the experimental schools were quite pleased with the positive change in attentiveness and aptitude of their students.

Implications of Results: Directed Listening Training at the Junior High level, based on these preliminary findings, does seem to significantly improve students' listening ability. Students who are below grade level appear to improve in the most dramatic fashion. Schools which are not participating in a directed Listening Program could also benefit from raised consciousness on the part of teachers and students to the crucial role of listening in education. Listening training should be implemented in all curricular areas.

83.59 R83.12

Implications for AISD: The results of this study and the continued enthusiasm of teachers in other schools such as Martin and Porter indicate that Listening Training has great promise in improving the performance of Junior High students. Additional teacher training, material and test development and curricular design are all supported by this study and an independent program analysis by College Board (see addendum). The success of the Listening Training at the Junior High Level also promises new approaches to basic skills training at other grade levels in the school system.

"THE EFFECT OF A TEACHER ACTIVE INSERVICE PROGRAM ON TEACHERS' UNDERSTANDING OF RELEVANT ENERGY CONCEPTS, STAGES OF CONCERN ABOUT IMPLEMENTING A CURRICULUM, AND STUDENT ACHIEVEMENT"

Abstract

Edward J. Zielinski Earl J. Montague, Ph.D.

Participating Schools: The following secondary schools participated in this study: David Crockett, William B. Travis, W.R. Robbins, Sidney Lanier, John H. Reagan, L.C. Anderson, Westlake, and Round Rock.

Description of Study: The purpose of this research is to study teacher active and teacher passive inservice programs. Evaluation of this study is being conducted by comparing profiles of the participating teachers' stage of concern about implementing novel curriculum and their knowledge of relevant energy concepts. Test instruments were administered before and after the inservices. Results will be compared between the two experimental groups. This study also evaluates the degree of implementation of the inservice models in terms of student achievement of relevant energy conservation concepts.

Description of Results: The teacher inservice group which was active during the inservice training program significantly (Alpha=.5) improved their knowledge of relevant energy concepts. The teacher passive group did not. Analysis of the stages of concern instrument indicated both teacher groups became more concerned and involved with the energy education curriculum. Both groups became more informed about the curriculum. Both groups lowered their personal and management stages of concern.

The mean scores of classes participating in the program were analyzed. There were no significant differences found between the groups on the Student Energy Knowledge Quiz.

Implications of Results: This study will assist administrators in planning effective inservice programs. It will assist teachers in the preparation of energy activities. Students received lessons of current personal, local, and national significance.

Implications for AISD: The participating teachers received curriculum and training for inclusion in ninth grade Physical Science. These teachers are now better prepared to teach relevant energy concepts within the current curriculum framework.

Children's Use of Conjunctions When Writing for Different Audiences and Purposes

Interim Report

Pat O'Neal Willis

Participating Schools: Cunningham Elementary

Description of Study: The purpose of this study is to examine children's use of conjunctions in their writing. I am interested in ascertaining the degree to which the intended function and audience of a text influence how 5th graders use conjunctions when they are writing. The role of these factors will be examined by looking at the frequency, type, and pattern of conjunctive relationships established in the writing.

Status of Study: Data for this study have been collected and are currently being scored and analyzed. In all, three rounds of scoring will be conducted.

- Each of the 450 texts has been scored wholistically by three raters. (The raters were elementary classroom teachers.) The purpose of this pass through the data was to ascertain the degree of coherence of each text.

- In preparation for the second round of scoring, the data have been examined to discover how the student writers used conjunctions in constructing their texts. It has been interesting to observe that children use conjunctions in written language very differently from their adult counterparts. These fifth graders seem not to be as steeped in the rubric of standard English as are adult writers. Their written conjunctions resemble those used in oral text. As a result, it has been necessary to modify Halliday and Hasan's classification of conjunctions to incorporate the various ways in which children establish conjunctive bridges in their writing. This descriptive analysis has been completed and a scoring system has been devised. At present, the data are being independently analyzed according to this system by three scorers. When this task is completed, the third pass through the data can be made.

- The final step in scoring the data will be to analyze and describe the type of meaning units which students link by means of conjunction in their texts. This analysis will be conducted using a text analysis system developed by Fredericksen and Fredericksen (in press). This system chunks meaning units in terms of events, event chains, episodes, and episode chains. Again three scorers will independently conduct this pass through the data.

It is anticipated that data analysis should be completed by September 1, 1984. Target date for completion of the project is April 1, 1985.

Impact of the Data Collection Procedure: To collect data for this study, 25 fifth graders completed three writing assignments weekly for a period of six weeks. The product of these combined assignments was 450 written texts including descriptions, stories, and expressions of feelings. Students wrote to trusted adults, peers, and kindergarten students. According to the classroom teacher, the impact of this unit of writing on student behavior was unexpectedly beneficial.

Over the course of the six weeks, the teacher kept anecdotal records of student comments and behaviors. She noted general improvement in four categories: academic performance, deportment, stress level, and attitude toward writing. To support her position, she cited examples like those that follow:

Academic Performance. One child who had been a poor student in all academic areas showed marked improvement in her attitude toward academic tasks and in the quality of her work after she began to succeed as a writer. This change was noted by all her teachers. A similar behavior change was noted in several students who had been considered "slow learners" in the past.

Deportment. One child who had several nervous habits (e.g. chewing pens, pencils, difficulty sitting still, difficulty working independently) appeared calmer and more self-confident after the writing unit began.

Another student who had been removed from enrichment classes because of inappropriate behavior reverted to his earlier, more appropriate conduct after he began writing.

Stress Level. Many children reported feeling relaxed when they wrote. One boy stated that through writing, he could express his emotions without fear of being called "sissy" by his friends.

Attitude Toward Writing. As the students got into the unit they began to look forward to writing time. Many found it difficult to stop writing at the end of the period. Several parents reported that the students talked with excitement about the writing project. One child stated that this must be the "learniest time of my life."

Implications for AISD: The classroom teacher reported that the quality of writing produced by her students during this project exceeded any she has gotten from students in the past. She intends to continue using the instructional methods designed for this unit with future students. Other teachers in her building requested training in the technique.

Given the success of this unit with one teacher and her students, it seemed possible that other teachers and students in the district might profit from training in the same instructional technique. During the 1983-84 school year, a writing program was developed based on the instructional technique used in collecting data for this study. That program is currently being studied. It is reported elsewhere in this volume.

INSTRUCTIONAL LEADERSHIP STYLES OF EFFECTIVE ELEMENTARY SCHOOL PRINCIPALS IN TEXAS

Abstract

Norma A. Lewis, Ed.D.

Participating Elementary Schools: Ortega, Read, Doss, and Oak Hill.

Description of Study: This study analyzed four instructional leadership styles utilized by effective elementary school principals in Texas. Each style is related to the teacher maturity level and the tight or loose coupling of the school. Demographic characteristics of respondents were described.

Elementary school principals who are effective instructional leaders were identified through a nomination process. The nominating committee of 101 members knowledgeable of Texas principals and their instructional leadership work contributed 310 nominations. Only those principals who received two or more nominations and for whom the superintendent of the school district consented for their participation were invited to respond to a questionnaire and a demographic data sheet. From the faculty roster submitted by the participating principal, the researcher randomly selected three primary and three intermediate teachers who also responded to the same questionnaire as well as a demographic data sheet designed for teacher participants. A total of 71 principals and 368 teachers participated in the study. The response rate for principals was 88.75% and that for teachers was 86.38%. The questionnaire used was developed at the University of Pennsylvania by Dr. Allan A. Glatthorn: Principal As Instructional Leader (PAIL). Data were collected in the spring of 1983. The study was completed in the spring of 1984. Data were analyzed for principals as a group, teachers as a group, and primary and intermediate teachers as separate groups.

Description of Results: The Centralized style of instructional leadership was the predominant style used by effective principals in the study. The Monitorial style ranked lower than the Centralized style, but there was no significant difference in the two. The Teacher-Centered style was not significantly different from the Monitorial style. The Decentralized style was significantly different from the other three and appeared to be almost non-existent among the elementary principals' styles of leadership. It is important to note that principals and teachers ranked the styles in the same order of Centralized being predominant, then Monitorial, followed by Teacher-Centered and few behaviors of Decentralized style were evident, although the principals ranked themselves higher in the style than did the teachers. On two styles, Centralized and Teacher-Centered, principals ranked themselves significantly higher than teachers ranked their principals. No significant difference was found between perceptions of primary and intermediate teachers regarding their principal's instructional leadership style.

The majority of principals in the study worked in school districts of over 3,000 ADA, had no assistant principals or grade level lead teachers, and supervised twenty-one or more teachers. During the last five years, 32.9 percent of the principals earned more than twenty-one hours of graduate credit and 54.8 percent of the teachers earned none. Less than one-half of teacher respondents belonged to any single professional association, and 94.4 percent of principal respondents belonged to the state elementary principal's association.

Implications of Results: There is strong evidence in the literature and borne out by the present study that effective principals utilize a highly directive and active instructional leadership style. The Centralized and Monitorial styles are highly directive and active but differ in the manner in which leadership tasks are initiated and carried out. The determining factors in choosing the appropriate style for effective leadership to take place appears to be the degree of loose or tight coupling of the school and the teacher maturity level that exists among the faculty. The principal must be a good diagnostician, skillful at selecting and utilizing the influence mode necessary to provide direction and support for the instructional program and student achievement. There is evidence that effective instructional leadership is not limited by the size of the district in ADA nor the size of staff or staffing pattern utilized. Effective elementary principals actively support professional growth activities for both teachers and principals. This modeling behavior and direct, active involvement is closely tied to the two predominant styles of Centralized and Monitorial instructional leadership.

Implications for AISD: The review of the literature included in the present study as well as the results presented above would indicate that any district would do well to take stock of the level of awareness among its principals in regard to leadership skills in general and specifically instructional leadership skills utilized by the principal. Through in-service or other appropriate professional growth opportunities, principals can be encouraged to become aware of their own predominant style of instructional leadership and the needs among staff and students that it serves. Support can be provided the principal, who is expected to provide effective instructional leadership, through continuous staff development sessions which focus on instruction and the leadership needed at the campus level. The principal needs specific in-put information and tools with which to work in order to provide appropriate instructional leadership. Then the principal must be provided information on student achievement as a result of the instructional focus. From this information, the principal must be equipped to analyze the processes that were utilized to obtain the end result, student achievement. There is not yet evidence to prescribe, cook-book fashion, an effective instructional leadership style for every principal. Available knowledge would encourage school districts to investigate more closely the relationship between context and style at the site-specific level.

The Test of Practical Knowledge and the OASIS Interest Schedule: Their Use with Students who are Visually Handicapped

Abstract

Anne L. Corn, Ed.D.

Participating Schools: Secondary Schools Serving Visually Handicapped Students participated in the study. In addition, visually handicapped students from public day and residential schools throughout Texas were included.

Description of Study: Two instruments, The Test of Practical Knowledge and the OASIS Interest Schedule were administered to visually handicapped students who attend eighth through twelfth grade classes. Individual and group scores were examined and compared to norms established by sighted peers. Multiple variables were correlated with performance on these two tests.

Description of Results: On The Test of Practical Knowledge the mean scores of visually handicapped students were below those of sighted peers. Totally blind students scored significantly higher than students with low vision. School placement, sex, age and other examined variables did not affect performance. On the OASIS Interest Schedule, visually handicapped students appeared to have a high positive orientation to the world of work. However, they did not differentiate their likes and dislikes of job tasks and of different occupations. Again, school placement did not affect performance. However, unlike The Test of Practical Knowledge, level of vision did not seem to be a factor in a student's occupational interests. (Statistical tables and articles submitted for publication have been forwarded to AISD.)

Implications of Results: Although visually handicapped students do receive instruction in skills of daily living, orientation and mobility, etc., they do not appear, as a group, "to pick" up practical knowledge which may be needed in order for them to function with their learned skills. It may be erroneously assumed that those students who have low vision will acquire this knowledge which is not necessarily taught in school subjects. Visually handicapped students appear to be immature in their abilities to identify specific occupational interests. This may be due to a lack of real exposure to the world of work or the ability to observe individuals at work in the community.

Implications for AISD: It is recommended that the program for visually handicapped assess individual student's scores (which were returned to teachers) to determine whether any weaknesses in practical knowledge

should be addressed in IEP's. In addition, those areas of practical knowledge which may be unique to the visually handicapped population, and not contained in the TPK, could be discussed and considered in curricular adjustments for Activities of Daily Living. Career Education and vocational experiences for visually handicapped students in graded classes should be addressed as they relate to occupational knowledge and employment opportunities for teenagers.

Teacher Beliefs Study
(Original title, A Study of Teacher Thinking and Decision Making)

Abstract

Walter Doyle, Principal Investigator
(Originally proposed by LeBaron Moseby)

Participating Schools: Murchison Junior High School

Description of Study: This study was designed to examine (1) the nature of the beliefs and goals held by teachers in various subject matter areas; (2) the ways teachers' belief systems are influenced by school context; and (3) the linkages between teachers' beliefs and their actions in the classroom.

AISD was one of three school districts participating in the study. A total of eight teachers participated, and the Austin component of the research consisted of two teachers, one English and one social studies. Classes taught by these teachers were observed and videotaped once a week for 12 weeks in the Fall of 1983. The teachers were interviewed on an average of twice a week about their thoughts during the classes observed, and about their attitudes toward teaching in general, their students, discipline, and the community and administrative contexts in which they worked.

Description of Results: The data collected by these studies suggests that teachers' goals, intentions, and beliefs about curriculum and classroom interaction are multiple and sometimes mutually inconsistent. Teachers in different subject matter areas hold different types of goals for their teaching: Math teachers goals are more likely to be defined in terms of coverage of text material or the introduction of topics in a standard sequence. Social studies teachers, by contrast, are much less concerned with imparting concrete bodies of knowledge and more concerned with teaching general study skills.

Teachers' goals and beliefs can be analyzed in terms of general commitments to certain definitions of teaching: (1) teaching as work; (2) teaching as a vocation; and (3) teaching as a profession. The type of commitment teachers have is an important determinant of the extent to which their classroom practices are influenced by administrative and community interests.

Teachers' beliefs are closely linked to their classroom practices, but in some cases the direction of the linkage varies. That is, beliefs both guide future actions and retrospectively make sense of actions already completed.

Implications of the Results: This research indicates that teachers' beliefs about teaching are important determinants of how they act in the classroom and how they respond to interventions or innovations introduced from the outside. The research provides administrators and practitioners with a framework for conceptualizing forms of teacher commitment, and has the potential for showing how different patterns of commitment can be facilitated or impeded by school organizational structure and district resource distribution patterns.

Implications for AISD: The small number of teachers from AISD in the total sample make the results of the research necessarily tentative for that particular setting. Nevertheless, it can be argued that the research has the potential to help district administrators identify organizational arrangements and resource distribution patterns which can nourish professional commitments to teaching and lead to more effective implimentation of innovations and improvements in teaching practice.

AN ANALYSIS OF INNOVATION IMPLEMENTATION AND CHANGE FACILITATOR STYLES OF HIGH SCHOOL PRINCIPALS

Interim Report

Martha C. Hougen, B.S., M.A.

Participating Schools: Three AISD high schools

Description of Study: The purpose of the study was to determine if high school principals exhibited specific change facilitator styles when implementing an innovation in their schools and if the different styles had an effect on teachers' stages of concern. The innovation studied was the District mandated "computer initiative" which was designed to provide computer hardware, software, and instruction for high school students. The interventions made by the principals were documented and analyzed. Pre- and post-tests of teachers' Stages of Concern were made to determine if there was a relationship between number and type of intervention made by the principal, their Change Facilitator Style, and the Stages of Concerns of teachers. The theoretical framework and instruments used are part of the Concerns Based Adoption Model developed by the Research and Development Center for Teacher Education at The University of Texas at Austin.

Description of Results: The results are in the process of being analyzed. From preliminary analysis the results appear to indicate that the three principals studied do exhibit distinct Change Facilitator Styles (Initiator, Manager, and Responder). The principals differed in the number and type of interventions they made during the first semester of the computer initiative, and also differed in the extent to which they implemented the use of computers in their buildings. All principals fulfilled the basic District mandate, but the Initiator principal went far beyond the mandate to provide a comprehensive array of opportunities involving the use of computers for both teachers and students. Teachers' Stages of Concern have not yet been analyzed.

Implications of Results: The results have not yet been finally determined. However, it is hypothesized that different principals will have different Change Facilitator Styles and that this style will affect the implementation of an innovation in their building.

Implications for AISD: If the hypothesis is true, then District policy makers should consider the Change Facilitator Style of personnel selected to implement an innovation such as the computer initiative. Some principals will implement an innovation more completely and successfully than others. The Initiator Style appears to be most successful in implementing an innovation in a high school.

BIOLOGICAL INVESTIGATIONS IN HIGH SCHOOL CLASSROOMS: A COOPERATIVE EFFORT OF TEACHERS, STUDENTS, AND SCIENTISTS

Interim Report

Kathleen A. O'Sullivan, M.A.

Participating Schools: Anderson High School, Crockett High School, and Travis High School.

Description of the Study: The purpose of this study was to evaluate the effects of cooperative biological investigations on high school biology teachers, students, and university scientists. Three investigations were conducted: (1) an insect collection at Travis High School in October, 1983, (2) an identification of seagrass seeds reserves at Crockett High School in February, 1984, and (3) a measurement of buckeye floral structures at Anderson High School in April, 1984. All of the investigations included (1) teacher-presented lessons on the topic, (2) teacher demonstrations of data collection procedures and techniques, (3) student collection and recording/preparation of data, and (4) two presentations by the cooperating scientist, one prior to and one following data collection on the purpose and results of the investigation, respectively. For some of the classes in each investigation these presentations were live; other classes viewed videotapes of the presentations. Ten classes and four teachers participated in the insects investigation, fourteen classes and six teachers participated in the seeds investigation, and six classes and three teachers participated in the flower investigation. For each investigation measures of science processes understanding, attitudes toward science (four scales for students, seven scales for teachers), and response to the investigation (questionnaires) were administered to participating and control teachers and classes. The three scientists were interviewed to evaluate the reliability and usefulness of the student-collected data and to elicit their reactions to the investigations.

Description of Results: Initial analyses on adjusted class means, N = 34, for all three investigations indicate no significant differences on the science processes and the four scales of the attitudes toward science measures among the insects, seeds, flowers, and control classes. For the Attitude to Inquiry Scale of the attitudes toward science measure, the live group mean score was significantly ($p = .033$) more positive than the video group mean score. Initial analyses on teacher scores on the science processes and seven scales of the attitudes toward science measures indicate a significantly ($p = .028$) higher score for participating teachers than for the control teachers. The overall response of students to the investigations themselves, as indicated on the questionnaires, was positive, with over half the students in each investigation reporting

that they enjoyed learning about the topic in this way and that they would like to participate in a different investigation with another scientist. On the teacher questionnaire, all thirteen teachers agreed that they enjoyed participating, working with a scientist, and working on an open-ended investigation. All but one teacher, who was uncertain, felt that the experience was worthwhile for students and eleven teachers felt the experience was worthwhile for themselves (others uncertain). Twelve teachers believed they had made a genuine contribution to a scientist's research and eleven believed the same for their students (others uncertain). All three scientists stated that their participation was worthwhile in terms of the data collected by the teacher-supervised students. They also reported that they enjoyed the experience, would participate again, and would recommend such investigations to their colleagues.

Implications of Results: Conclusions drawn from the results of this study are tentative at this time as analyses and subsequent interpretations are not yet final. It appears likely that research experiences, as provided in this study, have no effect on students' or teachers' understanding of science processes. The difference for students on the Attitude to Inquiry Scale favoring the live treatment suggests that the use of videotapes may diminish the impact of such experiences on students' attitude to inquiry. The difference for teachers on the Social Implications of Science Scale suggests that the experiences positively affect teachers' attitudes about the social implications of science. There is strong descriptive evidence from the study that students enjoy such experiences and that teachers perceive them as worthwhile for themselves and their students. The study has demonstrated that when given the opportunity, intact classes of students can collect reliable data, useful to a scientist's ongoing research efforts. Scientists indicated that their participation was worth the effort involved, and that they would like to continue to be involved in such a program.

Implications for AISD: As noted in the preceding section, the implications of this study for the AISD must be tentative at this time. The biological investigations of this study seem to have little or no effect on high school biology teachers' and students' process skills understanding and attitudes toward science as indicated by scores on the measures utilized in the study. However, teachers do consider such experiences as worthwhile for themselves and their students, students do report them as enjoyable, and scientists do perceive them as viable. It should also be noted that the students involved were intact classes; the experiences were intended for all students, not just the gifted and talented. With reservation at this time, it may be that further cooperative efforts between AISD biology teachers and their students and University of Texas at Austin scientists are feasible and worthy of pursuit for all involved.

THE EFFECT OF PARENT-TEACHER COMMUNICATION AND PROBLEM SOLVING ON THE EDUCATIONAL DEVELOPMENT OF UNDERACHIEVING ELEMENTARY STUDENTS

Abstract

Craig A. Porterfield, M.A.

Participating Schools: Blackshear, Harris, Langford and Ridgetop Elementary Schools

Description of Study: The purpose of this study was to examine the effects of establishing an ongoing, collaborative problem solving relationship between elementary school teachers and the parents of underachieving children. The teachers participated in a 7-hour workshop on this topic. The parents of two underachieving students from each of their classes were randomly assigned to (a) be contacted by telephone once a week for six consecutive weeks, or to (b) receive only the usual teacher-parent communication. The purpose of the frequent telephone calls was for the teachers to get the parents to help them figure out how to improve the school work and related problems of the underachieving child - applying the strategies learned in the workshop.

Objective measures of children's attitude toward school, academic self concept, and daily work performance were completed by and for the student participants during the weeks preceeding and following the parent contact period. In addition, the parents and teachers completed logs of the conversations and student interventions, and evaluative questionnaires.

Description of the Results: Half of the teachers dropped out of the project before it started, and only five remained at end - a number too small for statistical analysis. Therefore, it is impossible to reach firm conclusions from the objective outcome data. In addition, the children's pretest scores were uncharacteristically high on the affective tests (probably because they did not believe that the results would be confidential) and on the daily work records (probably because their parents told them about the project before the pretest week), which made it very difficult to show positive change over time. (The study will be conducted again in the fall of 1984 with UT student teachers who will be required to participate, subject to the principals' approval. Specific steps are being taken to reduce the high pretest scores.) In spite of these obstacles, some very encouraging trends were noted:

- underachieving students whose parents and teachers worked closely together to try to solve the students' school problems showed an increase between pre- and posttest in their general attitudes toward school, percentage of daily math and reading assignments completed and completed correctly, whereas underachieving students whose parents engaged only in regular communication

showed a decrease in each of these areas

- the perceived academic competence of underachieving students whose parents and teachers collaborated frequently did not change between pre- and posttest, whereas the perceived academic competence of underachieving students whose parents and teachers engaged only in regular communication decreased between pre- and posttest

The workshop and the parent contact experience were evaluated very highly by each of the teacher participants, and specific teacher and student benefits were noted in all cases. All of the parents except one were quite favorable toward the teachers and the project. Interestingly, the teacher who had the negative parent reaction did not seem to adopt the strategies that were taught (i.e, she was much more authoritarian and much less collaborative than the other teachers during the role plays of parent conferences), which provides further support for the validity of the strategies. It was also interesting that this teacher showed positive results in daily work but negative results in student attitude.

Implications of Results: Based on only five teachers, the results of this study await further verification in the fall, 1984 study which will use a larger group of student teachers. The preliminary impressions of the current study are that, when elementary teachers frequently use the prescribed methods to get the parents of underachieving children to help them figure out how to resolve the children's work performance and related problems, the students improve their work performance and attitude toward school. A hypothesis was raised that the misapplication of these methods (i.e., interacting with parents in an authoritarian rather than a collaborative manner) results in negative parents feelings, parent resistance, and negative student attitude.

Implications for AISD: The preliminary impressions are (a) that the types of skills taught in this project would be very valuable to AISD teachers who want to improve their abilities to get parents to help them figure out how to improve the school problems of underachieving children, and (b) that the ongoing use of these methods can lead to improved student work performance and attitude. Results of the 1984-85 study to be conducted with a larger group of UT student teachers will probably be much more conclusive on these points.

THE MODES OF COMMUNICATION USED IN JUNIOR AND SENIOR HIGH SCHOOL CLASSES BY HEARING-IMPAIRED STUDENTS AND THEIR TEACHERS AND PEERS

Abstract

Debra J. Raimondo

Participating Schools: Johnston and Reagan High Schools; and Pearce Junior High School.

Description of the Study: This observational study was conducted during the 1983-84 school year. The project was designed as a thesis topic to determine the modes of communication being used in mainstreamed classrooms with hearing-impaired students. In order to do so, the researcher observed hearing-impaired students in two different mainstreamed classes and recorded the communication modes being used with and by the hearing-impaired student.

Description of Results: Classroom observations showed that the predominant mode of communication in the junior and senior high school mainstreamed classroom is speech. Hearing and hearing-impaired interactants tended to use speech primarily. Also, when other modes of communication such as signing, fingerspelling, Total Communication, writing or pantomime/gesture were used, they were employed mutually by the hearing and hearing-impaired communicators.

In comparing these results to the opinions of a similar group of questionnaire respondents, it was found that teachers and hearing-impaired students are much more aware of how the hearing-impaired student interacts with hearing partners than how this same pupil communicates with other hearing-impaired peers.

Implications of Results: Academic, social and communicative improvements are proclaimed to be the results of integrating hearing-impaired children with hearing classmates. Mainstreaming a hearing-impaired student, however, does not assure him of reaping these benefits automatically. Teachers and hearing and hearing-impaired students must sharpen their skills in communicating with each other in order to ensure these goals. Action must be taken especially to motivate real social interaction among all of the students in the integrated classroom. Finally, each mainstreamed classroom should be evaluated as to the appropriateness of it as a communicative environment.

Implications for AISD: Teachers in AISD must acknowledge the possible situations which may lead to a breakdown in communication in the classroom. They must become aware of the possible benefits of using an auditory trainer in some noisy classrooms, and the invaluable benefit of repetition and appropriate turn-taking. The teachers must also develop methods to assure more interaction. Finally, the teachers must constantly monitor the appropriateness of the hearing-impaired child's placement in the integrated setting.

INVESTIGATE ACADEMIC PROBLEMS IN CHILDREN LIVING IN ONE PARENT AND TWO PARENT HOMES

Abstract

Geraldine Wyldon Ellison

Participating Schools: Campbell, Blackshear, and Maplewood Elementary Schools

Description of Study: The general purpose of this study was to determine the academic problems of twenty-four selected black students who live with a single parent and twelve black selected students who live with both parents.

Description of Results: Based upon the findings of the study, the writer concluded that there seem to be no significant differences between children who live with single parents and children who live with both parents. Data was analyzed by means of scores for married parents and means of scores for a single parent developed by (Fisher) t-test, which measures the mean of two random samples. The Iowa Test of Basic Skills were used in determining the academic performance of thirty-six students.

Implication of Results: Studies were discovered that the over-representation of black children from a parent being absent in the home does have a definite effect upon the child's academic achievement. However, the cultural and social environment can regulate their lives, even though a child's new environment may bring him stress and difficulty, it can also bring him growth and a better life.

Implication for AISD: This study will contribute to the Austin Independent School District because it gives the teachers insight into possible contributing factors towards the child's underachievements.

"SOCIAL SKILLS DEFICITS IN LEARNING DISABLED ADOLESCENTS"

Abstract

Diane Silver

Participating Schools: Subjects were drawn from a total of twelve junior high or middle schools serving four rural and two urban school districts, one of which was the Austin Independent School District. The following junior high schools from AISD were involved in the study: Bedichek, Dobie, Fulmore, Martin, Murchison, Lamar and O.Henry.

Description of Study: Recent research which examines the nature and development of social competence has resulted in an awareness of the relationship between peer status and later adjustment. There is reason to believe that learning (LD) adolescents, who are by definition experiencing difficulties in the academic environment, may, in addition, be at particular risk in developing interpersonal problems which may lead to low peer acceptance. Adolescents, who appear to be particularly sensitive to their abilities to function successfully in their social milieu have remained virtually unstudied.

The present study proposed to examine one aspect of social competence--social problem-solving skills and its possible relationship with behavioral adjustment. Eighty-eight eighth-grade, Anglo, male students (forty of whom were being served by special education as learning disabled, twenty-two low achieving and twenty-two normally-achieving) participated in the study. Social problem-solving skills were evaluated by means of three paper and pencil tasks which focused upon a variety of social situations. Behavioral adjustment measures were comprised of student self-ratings of relationships at home, school and with peers; and ratings of each student participant by two teachers and one parent. A measure of peer status was used as a separate part of the study with five eighth-grade homeroom classes in three of the rural schools.

Description of Results: Overall findings included significant differences between the social problem-solving skills of LD students and normally-achieving peers, with LD students performing more poorly on all measures. There were no significant differences in social problem-solving abilities, however, between learning disabled and low-achieving non-LD students. LD students who were included in the portion of the study which focused upon peer status,

received significantly more negative ratings from peers than their non-LD classmates. Students demonstrating greater social problem-solving abilities also received more positive ratings from teachers. This was especially true for the LD group.

Implications of Results: Suggested is the possibility that some adolescent males who are at risk academically may also experience difficulty in developing skills needed to make the kinds of judgements in social situations which are most likely to result in positive outcomes. Concommitantly, they are perceived more negatively by teachers and classmates.

Implications for AISD: While there is definitely a need for further research of this type involving LD adolescents, there is the suggestion that for some students who are experiencing learning difficulties, it may be important to focus not only upon the remediation of academic problems but upon the learning of effective interpersonal problem-solving skills as well.

A STUDY OF SECONDARY EDUCATION IN AISD

Abstract

League of Women Voters of the Austin Area, Education Committee,
Pat Oakes, Chair, Evelyn Bonavita, Carole Buckman, Donna Green,
Mary Ann Rivera, Margaret Roach, Jo Smith, Marian Vitucci

Participating Schools: Austin ,Crockett, LBJ, Johnston, Lanier, McCallum, Reagan, Travis

Description of Study: The purpose of the League of Women Voters study of secondary education in AISD was to inform ourselves and others on the issues of: merit and/or incentive pay plans for teachers and principals; the role of counselors in secondary schools, the scope of the honors program; the purpose of weighted grades in secondary honors courses; the role of extra and co-curricular activities within the context of increased emphasis on academics. We informally surveyed school personnel, referred to various AISD-ORE studies, and researched the above issues in journals and magazines.

Implications of Results: Through its consensus process, the League came out in support of: an incentive based compensation plan for all teachers and principals who qualify; more efficient use of counselor skills with focus on academic and career counseling as well as adjustment counseling; support of an honors program with weighted grades for those students who participate in it; scheduling of co- and extra-curricular activities during non-school hours as much as possible.

Implications for AISD: As these issues come before the school board, the League will lobby for the positions developed from the study.

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AN INVESTIGATION USING A HIGH-FREQUENCY EMPHASIS SPONDAIC WORDLIST FOR SPONDEE THRESHOLD TESTING WITH CHILDREN

Abstract

Sharon T. Oprsal

Participating Schools: Brock Elementary

Description of Study: The purpose of the present study was to analyze conventional words used to test children's hearing thresholds for speech and to investigate the use of a wordlist with high-frequency (pitch) emphasis. This is defined as words containing phonemes with high frequency energy such as s, sh, ch, th, and f, and a fewer number of low frequency phonemes such as b,d,and g. The study investigated the performance of normal hearing children and children with high-frequency hearing losses on both wordlists. A high-frequency hearing loss was defined as having normal hearing for low and mid frequency pitches and reduced sensitivity to high pitches.

Description of Results: Normal-hearing children performed the same on both wordlists. The thresholds for speech obtained with conventional as well as with the experimental words correlated equally with thresholds for hearing pure-tone pitches. The children with high frequency hearing losses performed significantly different on the two wordlists. The thresholds for speech obtained with the high frequency-emphasis wordlist showed greater reduction in hearing than with the conventional wordlist in all hearing-impaired subjects.

Implications of Results: Since normal hearing children perform equally on both types of spondees, the wordlists can thus be said to be equally intelligible. Children with high frequency hearing losses responded to the conventional spondees at a quieter level due to cues obtained form the low-pitched components. They required a louder level of intensity to identify those words with more high-pitched components due to the nature of their hearing losses. The speech reception thresholds obtained with the latter group of words was more representative of the true nature of their specific hearing loss. The use of this special wordlist (with pictures) in testing very young children may identify high frequency hearing losses at an earlier age than with broadband conventional spondees.

Implications for AISD: The results presented above are necessarily tentative since they were based on a total of ten hearing impaired ears. However, a difference in thresholds of at least 8 decibels was noted between wordlists in all hearing impaired children. Identification of a hearing loss of this nature usually does not occur until a child is mature enough to respond to pure-tones. Early identification of a high frequency hearing loss would allow early intervention such as appropriate classroom seating, family and school awareness and amplification if necessary

ORGANIZATIONAL FACTORS ASSOCIATED WITH REDUCING ALIENATION IN SCHOOLS SERVING THE UNPREFERRED STUDENT

Abstract

Jimmie L. Todd

Participating Schools: Robbins High School

Description of Study: The purpose of the study was to identify whether the organizational structure of alternative schools impacted the students' attitude toward school and their alienation from school. Examined in this study were whether or not the teachers control strategies and the organizational characteristics (hierarchy of authority, rules and regulations, and impersonalization) influenced the students' attitude toward school and their alienation from school. The study was limited to alternative schools in Texas which have been in operation five or more years.

Description of Results: The data is in the process of being analyzed. A complete report will be filed with Austin Independent School District when the study is completed.

Implications of Results: The implications will be forthcoming upon completion of data analysis.

Implications of AISD: The study will provide Austin Independent School District with knowledge of which components of an alternative school are associated with reducing students' alientation from school and improving their attitude toward school. These implications will be included in the disseration and abstract.

AN OBSERVATIONAL STUDY OF YOUNG CHILDREN USING MICROCOMPUTERS

Abstract

Celia Genishi, Ph.D.

Participating School: Highland Park Elementary

Description of Study: The purpose of the study was to observe one kindergarten and one first grade class use the microcomputer as they learned LOGO in the computer laboratory. Data were videotaped for a total of 11 days over a period of 3 months. We have approximately 27 hours of videotaped data. For the major part of the study, we videotaped a different focal child in each class on each day that we collected data, along with her/his computer monitor, so that we would have a record of her/his input. Toward the end of the study we also videotaped the teacher as she taught children in the computer lab.

Description of Results: Since we completed data collection in May, we do not yet have any firm results. We plan to transcribe the children's language first, to answer one of our main research questions, what is the nature of the child's talk as s/he uses the microcomputer? This summer will be spent transcribing that talk and beginning to analyze both the children's interactions with each other and with the LOGO program. Utterances and groups of utterances will be coded, for example, according to whether they are requests, responses, arguments, or non-task related. Our impressions after preliminary viewing of the videotapes are that 1) there is much interaction among the children, 2) much of the talk is task-related, 3) the teacher affects the amount of interaction there is, and 4) the teacher is very active physically as she attempts to help children in the computer lab setting.

Implications of Results: At this point we cannot state what implications might be, as analysis is not far enough along. We believe that there will ultimately be implications for teaching young children a program like LOGO, for example, we hope our results will show what children have learned about LOGO. In the area of teaching, we believe that there will be implications for management of the class in the lab setting. There might also be implications for software developers who lack information about exactly how children use their products.

83.59 R84.17

SPATIAL EXPLORATION AND SPATIAL ORIENTATION ABILITIES IN YOUNG VISUALLY HANDICAPPED CHILDREN

Abstract

Nancy Hazen-Swann, Ph.D. and Margaret Sullivan

Description of study: The purpose of this study was to examine spatial exploration and spatial orientation abilities in young visually handicapped children. We videotaped three preschool children, one totally blind and two partially sighted, as they explored an unfamiliar preschool classroom with their parents. After we observed each child's exploration twice, we presented the children with a task designed to assess their memory for spatial locations. The totally blind child was asked to replace three objects after walking between them several times, and the partially sighted children were given a comparable, but more difficult, task in which they were asked to replace 14 objects in a playroom after several minutes of playing in the playroom.

Description of results: The partially sighted children were very active explorers; their exploration was as extensive as that of children with normal vision who have been studied previously. The parents of both partially sighted children encouraged them to explore independently; that is, they encouraged the children to make their own decisions about what and where to explore. The partially sighted children did as well on the spatial location task as normal children who were also independent explorers, and better than normal children who were passive explorers. The totally blind child also explored actively, but to facilitate her exploration, her mother provided her with verbal instructions about what was in the room and how to get there. The child received very little physical assistance while exploring. In the spatial location task, the child was able to move in the correct direction to replace the objects, but requested verbal instructions about where to stop.

Implications of results: The results suggest that the spatial exploration and orientation skills of partially sighted children can be equal to those of normal children. The extent to which a child is encouraged to explore actively and independently may be more important than the child's visual acuity in affecting his or her spatial exploration and orientation skills. Totally blind children, however, may need verbal guidance to give them an idea of what is available for exploration and where it may be found. This kind of verbal guidance may be superior to physical guidance in facilitating spatial orientation skills.

Implications for AISD: The results imply that, for all children, encouraging active, independent exploration facilitates the development of spatial orientation skills. Optimal guidance for partially sighted children may be the same

as that for normal children: simply provide a safe environment in which they can explore freely, and encourage them to make their own decisions and take the lead during exploration. The same may be said for totally blind children, except they may need help in discovering what is available for exploration and where it is. Spatial orientation skills are probably facilitated better by verbal than by physical guidance, but care should be taken that children do not become overly dependent on verbal feedback in making spatial judgements. These results are quite tentative due to the small size of the sample. We are currently in the process of seeking more subjects for this study, so that we may offer more conclusive results that may be applied to early childhood programs for visually handicapped children.

Sexual Bias in the Mathematics Classroom: The Teacher's Role

Abstract

Gail R. Ryser

Participating Schools: Lamar, Fulmore, and O'Henry Junior High Schools

Description of Study: The purpose of the study was to identify differential treatment by mathematics teachers of male and female students and differences in male and female mathematics teachers' teaching strategies. Three male and three female seventh grade mathematics teachers were observed for ten class periods each.

Description of Results: Teachers sustained students' responses by 1) repeating the question, 2) rephrasing the question or giving a clue, and 3) asking a new question. The results indicate male teachers sustain students' answers significantly more than female teachers. Teachers verbally contacted male students more frequently than female students during seatwork assignments. These contacts were initiated by both the student and the teacher.

Implications of the Results: Male students ask more questions concerning their mathematics assignments and are approached more by the teacher, than female students. This could indicate male students are more verbal about difficulties they are having with their assignments. Male teachers may sustain students' responses more than female teachers because they are not as concerned with the student giving the wrong answer, whereas female teachers do not want the student to fail more than once.

Implications for AISD: Since previous research has indicated that the achievement of male students in mathematics is greater than that of female students, changes in teaching strategies could help bring the female student's achievement up to the level of the male student. One change is more involvement with female students during seatwork to make sure the assignment is understood and to encourage them to seek help when having difficulty. Another change is to sustain a student's wrong or partially correct response. Two reasons for this change are, to eliminate incorrect responses because the student misunderstood the question and to give the student more time to collect his thoughts and think through the question more carefully.

The Effect of Brief, Structured Writing Practice on Children's Written Composition

Interim Report

Pat O'Neal Willis

Participating Schools: Brooke, Becker, Cook.

Description of Study: The purpose of this study is to examine the effect of a year-long writing program on the overall quality of children's written compositions. The program was incorporated into the curriculum of one sixth grade teacher who had complete charge of its daily administration.

The treatment consisted of brief, consistent, structured writing practice administered three times per week. Each session was introduced by means of a guided fantasy which was used as a catalyst for text design. Following the presentation of the guided fantasy, students wrote for ten minutes without stopping. They were allowed to write about the topic presented in the fantasy or about another topic of their choice. The goal of each ten-minute session was to produce the first draft of a text. Mechanics of writing (i.e., handwriting, spelling, and punctuation) were de-emphasized during this initial writing period. De-emphasizing mechanics was important because it encouraged writers to devote their whole attention to creating the message conveyed by the text. Guided fantasy was important because it allowed students to experience textual content before they wrote about it.

The effect of this treatment is being measured by comparing the target group to two control groups where different types of writing practice have been used as a part of the regular curriculum. Two teachers, who are considered outstanding educators, volunteered to participate. Their participation in the study allowed a check of whether any improvement observed in the treatment might be attributed simply to teacher effects. In the first control group, brief unstructured daily writing practice took place. This practice involved students' writing in journals. In the second teacher's classroom, daily writing was not a practice. Writing in this classroom consisted of weekly assignment of formal papers which were submitted to the teacher for a grade.

The comparison of writing ability among the three groups is being measured by analyzing students' performance on five formal, in-class writing assignments administered during the spring at one-month intervals. The product of these combined assignments was 330 written texts.

Status of Study: Data for this study have been collected and are currently being prepared for scoring and analysis. It is anticipated that data analysis should be completed by February 1, 1985. Target date for completion of the project is April 1, 1985.

Impact of the Data Collection Procedure: Since the five assessment compositions were a part of the regular series of compositions assigned by the teachers, no unusual impact on the students was expected. The teachers did report, however, that students found the assigned topics particularly interesting to write about.

Impact of the treatment itself on the students in the treatment classroom was helpful in several ways. Here are some of the major benefits noted by the classroom teacher:

- Unlike the typical behavior of students when assigned a writing task, these students began writing without hesitation.
- When compared to previous classes, the stories of these students showed greater gains in coherence as the year progressed.
- The writing of these students improved in other curriculum areas while less improvement was noted in students who did not participate in the treatment group.
- The treatment group was made up of English and Spanish speaking students. Students wrote in their dominant language. Of their own accord, some Spanish writers began making the switch to English writing about midway through the year.
- Students across the city entered a statewide poetry writing contest. The first and third place winners were in the treatment group.
- Students of limited life experience began the year by simply retelling the guided fantasies in their compositions. As time went by, they began to develop these story starters into full-blown texts.
- Many students got into a story and continued to write about it for many sessions. Some stories were continued over as many as seventeen installments.

At the end of the school year, students were asked to evaluate the writing program. Their comments were like those that follow:

- "[The program] has helped me write more and understand it better."
- "When I have my free choice, I always have something to say in writing."
- "The part I like most is having time to yourself just to think and dream."
- "Writing lets you express all the feelings that are bottled up inside you."
- "I like it when I get so interested in my writing I just can't stop."

- "For me, the best part is when I'm deep in an epic story and eager to finish it and see how it turns out."
- "I still hate writing, but I'm a whole lot better at it."

Implications for AISD: This program has been previewed by teachers in three workshops this year. It seems to have wide appeal. Teachers are especially impressed with the technique's capacity to motivate students in the initial stages of writing. A videotape introducing the program is currently in preparation. It will be available for use in August. A training manual to accompany the videotape is in the planning stage. Positive results, indicating better compositions produced by the treatment group when compared to the two control groups, would validate the initial impressions of the teachers about this instructional program.

EFFECTIVE TEACHING PRACTICES IN THE MULTICULTURAL ELEMENTARY CLASSROOM

Abstract

William M. Bechtol, Ed.D.

Participating Schools: Blackshear, Metz, and Norman (as part of a larger study)

Description of Study: The purpose of the study was to identify the effective practices that teachers and principals use in schools in which minority students achieve in reading, writing, and mathematics. Twenty-one schools were studied. A school was considered to be effective if 50% or more of its students score above the expected student population scores on the majority of the objectives of the Texas Assessment of Basic Skills (TABS). The schools visited were limited to those who had a student population that was over 50% minority students.

Data was collected in the following ways: (1) interviews with the principals, (2) interviews with first, third, and fifth grade teachers who had been identified as effective in teaching minority students basic skills; (3) observations in the classrooms of the identified teachers; and (4) study of questionnaries completed by the principals and the identified teachers.

Description of Results: There are school staffs who have demonstrated that they can effectively teach minority students reading, writing, and mathematics. What effective teachers do to improve minority students' learning of basic skills include the following: (1) active teaching, (2) high exectations for students, (3) good use of instructional time, (4) good classroom management, (5) practice, (6) reviews, (7) positive approach to teaching, and (8) work with parents.

Effective principals (1) set school goals and communicate them; (2) put student achievement first; (3) lead; (4) support teachers; (5) encourage student attendance; (6) develop a positive learning climate; (7) provide adequate materials and equipment for teaching; (8) encourage teacher planning at grade level and across grade levels to increase student learning; (9) model; (10) visit classrooms and evaluates teaching regularly; (11) monitor student progress; (12) listen; and (13) work carefully with parents and community.

Implications of Results: The effective general practices for teaching minority students basic skills and specific techniques for teaching reading, writing, and mathematics, for motivating students' learning, and for effective classroom management have been identified. These practices can be taught to in-service and pre-service teachers, principals, supervisors, and counselors.

Implications for AISD: The results presented above would be useful topics for in-service programs for elementary teachers, principals, supervisors, and counselors. It does appear that individual school staffs by studying, planning, and working together can effectively use these strategies to teach minority students basic skills.

EVALUATING STUDENT'S COPING STYLE

Abstract

James E. Gilliam, Ph.D.

Participating School: Webb Elementary

Description of Study: The purpose of this research was to gather data on the copcept of coping. An experimental edition of the Test of Coping Style was designed and administered to 66 students at Webb Elementary School. The Test of Coping Style is a 24 item open-ended questionnaire which asks students what they would do in response to a stressful event.

Description of Results: At this point the data abe being coded in preparation for computer analysis. Basic questions to be answered include: How do student's cope with social stressors? Are there common factors in students' coping responses? What additional social stressors need to be included.

Implications of Results: At this point it is premature to speculate on the results. The data should be analyzed by July 30, 1984 and the final report submitted by August 31, 1984.

83.59 R84.22

KNOWLEDGE OF FORMS AND FUNCTIONS OF PRINT IN PRESCHOOL-AGED CHILDREN

Abstract

Nancy Roser, Ph.D. and James Hoffman, Ph.D.

Participating Schools: Allan Elementary, Brentwood Elementary, Brown Elementary, Casis Elementary, Dawson Elementary, Govalle Elementary, Harris Elementary, Joslin Elementary, Oak Springs Elementary, Odom Elementary, Pecan Springs Elementary, Pillow Elementary, Rosewood Elementary, Summitt Elementary, and Zilker Elementary.

Description of Study: The purpose of this study is to advance our understanding of early literacy by describing: first, the developing knowledge of forms and functions of print in two-, three-, four-, and five-year old children; and second, the literacy events contributing to this knowledge base. All preschool children are younger siblings of successful first grade readers.

Description of Results: The study is currently in progress. Parents of successful first grade readers, nominated by their teachers, were invited to participate if there was a younger sibling in the home between the ages of two and five. Through the participating schools, we have received 82 acceptance letters. Fifty interviews have been completed. Remaining tasks include: conducting 32 interviews, obtaining end of year achievement scores for the first grade children, and analyzing our data.

Implications of Results: Through this study we hope to be able to describe in greater detail the character and exact nature of the literacy environment. More importantly, we hope to be able to describe patterns of growth in knowledge of forms and functions of print among two-, three-, four-, and five-year old children.

Implications for AISD: We anticipate outcomes from this work which will relate to such programmatic issues as: (1) parent education, (2) readiness programs, and (3) early assessment.

HANDICAPPED MINORITY RESEARCH INSTITUTE ON LANGUAGE PROFICIENCY

Abstract

Alba A. Ortiz, Ph.D.

Participating Schools: The population for this research effort is handicapped Hispanic students in grades two through five who are being served by the Austin Independent School District in classes for the communication disordered, learning disabled, or mildly mentally retarded. The elementary schools participating in the study will be determined by the random selection of students. During year one of the study, however, there will be no direct involvement of schools as all student data will be collected from central office files and no campus contacts will be required.

Description of Study: The ultimate purpose of this research effort is to discover and provide critical information to schools and to practitioners relative to assessment and intervention strategies that prove to be effective to the provision of special education services to limited English proficient (LEP) and bilingual students. To accomplish this goal, a population of approximately 360 mildly mentally retarded, learning disabled, and communication disordered students currently being served in AISD will be followed for a period of five years. An examination of the various assessment practices, instruments, and procedures used by the district in referral, assessment, and placement of LEP and non-LEP Hispanics in special education will be conducted. In addition, the nature and effectiveness of existing special education intervention practices and service delivery options employed with these students will be documented. Research will be conducted by Institute staff to determine best practices in assessment and intervention. During the second year of the project, a related study of first and second language acquisition will be conducted to document language structures mastered by handicapped LEP and non-LEP Hispanics and a study validating the efficacy of the Kaufman ABC for use with this population will be completed.

Description of Results: During year one, data is being collected on mildly mentally retarded, communication disordered, and learning disabled students in the second, third, fourth, and fifth grades in several elementary schools in the AISD. This data includes assessment, referral, and placement information. Upon completion of data collection in July, data analysis will begin. The product will be a description of critical variables related to referral, assessment, and placement of Hispanic students in programs for the mentally retarded, learning disabled, and communication disordered in the district.

Implications of Results: Several major contributions to the field of special education are anticipated from this research project. The first is an empirically derived data base of knowledge and information which deals with service delivery to exceptional Hispanic students. The results will

generate data-based recommendations associated with best practices in the identification, assessment, placement, and service delivery of exceptional Hispanic students. A significant contribution of this project will be the development and validation of several models for referral-assessment and for instructional interventions for exceptional Hispanics.

Implications for AISD: Several benefits related to student education are projected for AISD. It is anticipated that the project will provide a comprehensive analysis of the characteristics of LEP and non-LEP students who have been identified and placed in AISD programs for the mildly mentally retarded, learning disabled, and the communication disordered. Another benefit for the AISD will be the identification of those linguistic, cultural, cognitive and other factors that should be incorporated in the design of optimal assessment and intervention practices used by the school district. On-going staff development and consultation services related to the education of handicapped Hispanic students will be available at no cost to the AISD. The Handicapped Minority Research Institute will also provide AISD with an annual comprehensive review of the literature in the following areas for use by district staff:

1. National Incidence of Exceptionality of Hispanics by Handicapping Condition

2. Service Delivery Options for the Bilingual Exceptional Child (Intervention and Curriculum)

3. Assessment Instruments, Procedures and Strategies Used with Bilingual Handicapped Students (including Language, Intelligence, Achievement, and Adaptive Behavior)

4. Second Language Acquisition and Implications for Language Development in the Handicapped Bilingual Student

5. Parental Involvement in the Special Education Process

6. Attribution Theory/Learned Helplessness and Achievement for the Hispanic Child: Implications for Special Education Referral and Placement

7. Teacher-Pupil Interaction Patterns and Their Effect on Student Performance

8. The Influence of Socio-Cultural Factors on Academic Achievement: Implications for the Exceptional Bilingual Student

The Handicapped Minority Research Institute will provide to the district copies of all written products developed during the course of this research project.

Relationship Between Multiple Risk Factors and Child Outcome for Children of Adolescent Parents

Abstract

Anne Martin

Participating Schools: Johnston High School, Travis High School, and Allen Elementary School Teenage Parent Program.

Description of Study: Numerous studies have identified children of adolescent parents as a group at risk medically, cognitively, and socially. However, little research has looked at differences within a group of children of teenage mothers in order to predict which children are at greatest risk. The purpose of the present study is to examine the relationships existing among variables identified in the literature as risk factors for the children of young mothers and the children's developmental outcome. The study seeks to determine if certain clusters of risk factors (environmental, maternal, or child factors) are most predictive of developmental delay.

Description of Results: Data collected from participating Austin I.S.D. students will be combined with data from other young mothers and their children in the Central Texas area. Data collection has not been completed at this time.

Implication of Results: Results of the study will be of use to service providers in identifying which infant/adolescent mother dyads are in greatest need of services and in suggesting appropriate goals for intervention strategies.

Implications for AISD: Results of the study will be of use to the AISD programs serving teenage parents and their children by suggesting which factors and combinations of factors are most important to address in preventing developmental delay in the children of teen parents, and by providing a profile of high-risk characteristics.

Managing Academic Tasks in High Schools

Project No. R84.29

Interim Abstract

Walter Doyle, Principal Investigator

Participating Schools: Not yet selected

Description of Study: This study examines how the content of the curriculum is translated into classroom tasks in secondary schools, with particular attention to tasks involving higher cognitive processes. Phase I consisted of a study of academic tasks in seven junior high school classes in AISD during Spring and Fall of 1983. Phase II, proposed herein, will entail data collection during Fall 1984 in two high school science and two high school English classes. Data collection will include daily observations, examination of instructional materials and completed student work, and interviews of the teachers and selected students. During Spring 1984, teachers will be selected through nominations (subject coordinators, principals, and University student teaching coordinators), preliminary classroom observations, and interviews.

Description of Results: Data collection does not begin until Fall 1984. Selection of teachers is underway at this time.

Implications of Results: A final report of the high school phase of the MAT and a report on practical applications of MAT methods and findings (based on both the junior high and high school studies) will be produced during 1985. Preliminary results of Phase I of the MAT have demonstrated the complexity of managing secondary school work, especially work that is intended to give students experience with higher cognitive tasks. The high school phase of the study should lead to information and recommendations on structuring and directing student work, translating academic content and cognitive objectives into classroom tasks, and assessing task outcomes. This knowledge will extend previous findings of research on classroom management to help secondary teachers establish effective work systems in their classes.

Implications for AISD: Research results can be used to help the District increase secondary teachers' understanding of curriculum tasks, especially higher cognitive tasks. Such information has potential for improving teachers' effectiveness in planning student assignments, presenting instruction and monitoring student work, and assessing task outcomes.

External Research: Helping Education Change for the Better
Cover Drawing by Vanessa McLean, Austin High School
Office of Research and Evaluation Publication Number 83.59

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